PRELIMINARY INVESTIGATION REPORT

ACCIDENT OF Mi-17 HELICOPTER REG. NO AP-BIL OPERATED BY DGAKP CRASHED NEAR TEHSIL PINDALI, MOHMAND AGENCY, KPK PAKISTAN ON 15-08-2025

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ACKNOWLEDGEMENT

1. Interstate Aviation Committee (IAC) Russian Federation and General Headquarters for provision of technical support for Flight Data Recorder and Cockpit Voice Recorder readout in the investigation process.

2. Provision of security cover to the investigation team by Ministry of Defence, KPK Government, 11 Corps Pak Army and Frontier Corps at Pindali crash site and safeguard of wreckage at site and during transportation.

3. Administrative support provided by DGAKP, DC & AC Mohmand Agency, Rescue 1122, Local police, APM Peshawar, Base Cdr PAF Base Peshawar and CSO BKIAP for facilitating investigation team at BKIAP, onsite visits, accommodation, security cover, wreckage recovery & transportation. Moreover, dedicated provision of airlift and ensured availability of maintenance personnel by DGAKP facilitated BASIP investigation team during daily crash site visit for identification and recovery of wreckage.

4. Expeditious conduct of toxicology and forensic testing by Khyber Medical College Forensic Department and Punjab Forensic Lab.

5. All out support provided to BASIP investigation during the course of investigation by Ministry of Defence (Additional Secretary IV), KPK Govt (Chief/ Principle/ Administrative Secretaries), Director General Airport Security Force (ASF), Director General Pakistan Civil Aviation Authorly (PCAA), Director General Pakistan Airports Authority (PAA) and General Headquarters (SD Dte, AFM Dte, MI Dte).

SCOPE OF INVESTIGATION

This safety investigation is being conducted by Bureau of Aircraft Safety Investigation Pakistan (BASIP) in accordance with Annex-13 to the ICAO Convention, and Pakistan Air Safety Investigation Act 2023. **The sole objective of this safety investigation is the prevention of accidents and incidents of similar nature without apportioning blame or liability**. Accordingly, it is inappropriate to use BASIP preliminary investigation report to assign fault or blame or determine liability, since neither the investigation nor the reporting process has been undertaken for that purpose. This information is published for the aviation industry and public, referring to the general circumstances of this event, in line with the ICAO Annex-13 para 7.1 and 7.5. Extracts of this preliminary report may not be further published without permission from BASIP.

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Brief Description

1. On 15 August 2025 at 1008 hrs, Mi-17 helicopter Reg. AP-BIL departed Bacha Khan International Airport (BKIAP), Peshawar, for Boys Scout Helipad, Khar, on instructions from the KPK Government for immediate positioning to support flood-relief operations near Salarzai village (Srowano Upper Hill of Jibrarri), KPK. There were five persons on board: two aircrew, one flight engineer, one crew chief, and one radio technician.

2. At 0905 hrs, a KPK Government official assigned the mission to the Director General DGAKP, who relayed it to the Chief Pilot at 0907 hrs. Maintenance personnel were informed and arrived at the helipad between 0900–0930 hrs; preflight inspection began at approximately 0915 hrs. Aircrew reached the flight line at 0943 and 0946 hrs, and commenced 360° preflight checks at 0953 hrs. Engine start occurred at 0958 hrs, taxi at 1004 hrs, and take-off at 1008 hrs.

3. As per the original plan, the helicopter was to fly directly from BKIAP to Salarzai Village for a rescue mission. Since contact with the Salarzai local administration could not be established prior to take-off, both pilots informed their supervisor and were instructed to proceed instead to Khar (a location near Salarzai). The flight was planned to Boys Scout Helipad, Khar, at an altitude of 4,500 ft.

4. It is pertinent to note that Salarzai lies within a security-threat area where flight operations cannot be conducted without prior clearance from the relevant law-enforcement agency. This was highlighted to the supervisor by one of the aircrew, who also expressed reservations about operating in the area due to security risks. Furthermore, the Khushal Control frequency (the security agency controlling air traffic in threat areas) was transmitted to the pilots by the ground crew via text message after lift-off.

5. At approximately 10 NM from BKIAP, while changing over from Peshawar Tower to Cherat North frequency, the pilot requested to maintain 2,500 ft due clouds. Upon establishing contact, Cherat Approach North instructed the aircraft to establish two-way communication with Khushal Control. According to the available RT extract, no formal changeover to Khushal Control occurred. Requisite approvals from Air Headquarters are being obtained to access the radar data and full radio transcript.

6. The estimated flying time from Peshawar to Khar was approximately 30–35 minutes; however, no information regarding the helicopter's arrival had been received even after one

hour. Multiple attempts to establish contact through radio, mobile phone, and landline were unsuccessful. In parallel, a Pakistan Army helicopter departed Peshawar and, while flying inside the valley approximately 3 NM west of the crash site and avoiding adverse weather, landed safely at Khar. Additionally, another DGAKP helicopter departed at approximately 1230 hrs for Daggar, KPK, and also attempted to locate the missing helicopter. Due to prevailing weather conditions, it remained about 15 NM southeast of the crash site and, after completing its task in Daggar, proceeded to Khar.

7. Information regarding the missing helicopter was reported to BASIP at 1400 hrs. At approximately 1600 hrs, once weather conditions had improved, a DGAKP helicopter en-route from Khar to Daggar and thereafter to Peshawar continued its search along the Malakand Hills. The crash site was subsequently located near Pindali Village at an altitude of 3,194 ft. Due to fuel limitations, the aircraft recovered back to Peshawar. The accident was confirmed to all concerned agencies by 1630 hrs. After refuelling, two rescue sorties were conducted between 1630–1830 hrs by the DGAKP helicopter for the recovery of the five deceased persons.

8. As a result of the accident, all five Pakistani nationals on board sustained fatal injuries at the crash site. The bodies were recovered and transported to Khyber Medical College Forensic Department for toxicology and DNA testing. Following receipt of DNA test results from the Punjab Forensic Laboratory, Lahore, the remains were handed over to their respective heirs by DGAKP on 18 August 2025.

Helicopter Operations

9. The helicopter was owned by DGAKP for VIP movement and was also being used for relief operations on the instruction of KPK Government.

Timeline for Accident (PST)

10. **085909**. 02 Airframe technicians proceeded directly to the helicopter after entering through the airport entry gate and commenced pre-flight procedures.

11. **090500**. DG DGAKP received call from Official of Chief Minister (CM), KPK Secretariat for rescue operation near Salarzai village.

12. **090700**. Chief Pilot was informed by DG DGAKP regarding the mission received from KPK Govt and was further informed to aircrew appox at 0907-0910 hrs.

13. **091909**. 01 Electric technician directly arrived on the helicopter after crossing airport entry gate and commenced pre-flight.

14. **092100**. Refueler reached the helipad for refuelling.

15. **092157**. Flight Engineer arrived at Helipad in uniform and commenced pre-flight.

16. **092356**. Helicopter refuelling began without the fire extinguisher at the helipad.

17. **092733**. Helicopter batteries were brought to helipad for installation.

18. **092745**. Fire extinguishers were positioned at helipad.

19. **092902**. B1 Engg (limited) official arrived at helipad after crossing airport entry gate.

20. **093400** Helicopter refuelling stopped and refueler left the helipad at 093704.

21. **094332**. 1st pilot reached DGAKP office complex.

22. **094543** 2nd pilot reached DGAKP office complex.

23. **094630** Flight Engineer left helipad for office complex for briefing (probably).

24. **095153** Flight Engineer came back to helipad.

25. **095329**. Both pilots arrived at helipad for preflight (01 was seen smoking and other was busy on telephone during preflight).

26. **095516**. Both aircrew seated in aircraft (Captain of day seated on right seat).

27. **095754**. Left engine started.

28. **100034** Right engine started.

29. **100345**. Tea bar official brought tea for aircrew during running engine.

30. **100440**. Helicopter taxied out.

31. **100756**. Helicopter Lift off

32. **101136**. AP-BIL changed over to Cherat North

Meteorological Information

33. At the time of the occurrence, Terminal Aerodrome Forecasts (TAF) and actual observations (METAR) for Peshawar Airport (OPPS) indicated marginal weather conditions.

34. **TAF 15 August, 2025.** Predicted winds from 050° at 8 kt, visibility around 4 km in smoke, scattered cloud at 4,000 ft and broken at 8,000 ft, with temporary deterioration to 3 km in thunderstorms with few CB030 and rain between 1100 -1500 hrs .

35. **METAR 15 August, 2025 (1000-1200 hrs)**. Winds from 110° at 4 kt, visibility reduced to 2 km in smoke/haze, few clouds at 1,000 ft, scattered at 4,000 ft, broken at 10,000 ft, temperature 29 - 31 °C, dew point 25 - 27 °C, and QNH 1003 -1004 hPa.

36. **En-route Weather Observations.** Light winds, 8 km visibility, scattered to broken cloud layers at 4,000 - 10,000 ft and high humidity, with isolated rain reported. These conditions were conducive to reduced visibility and potential convective activity in the vicinity of the route and destination airport.

Accident Site

Accident site is located 3194 ft AMSL 356° 19.6 NM from RW35 threshold BKIAP. Helicopter main wreckage lies at position 33°18'32'' N 71°29'30'' E.

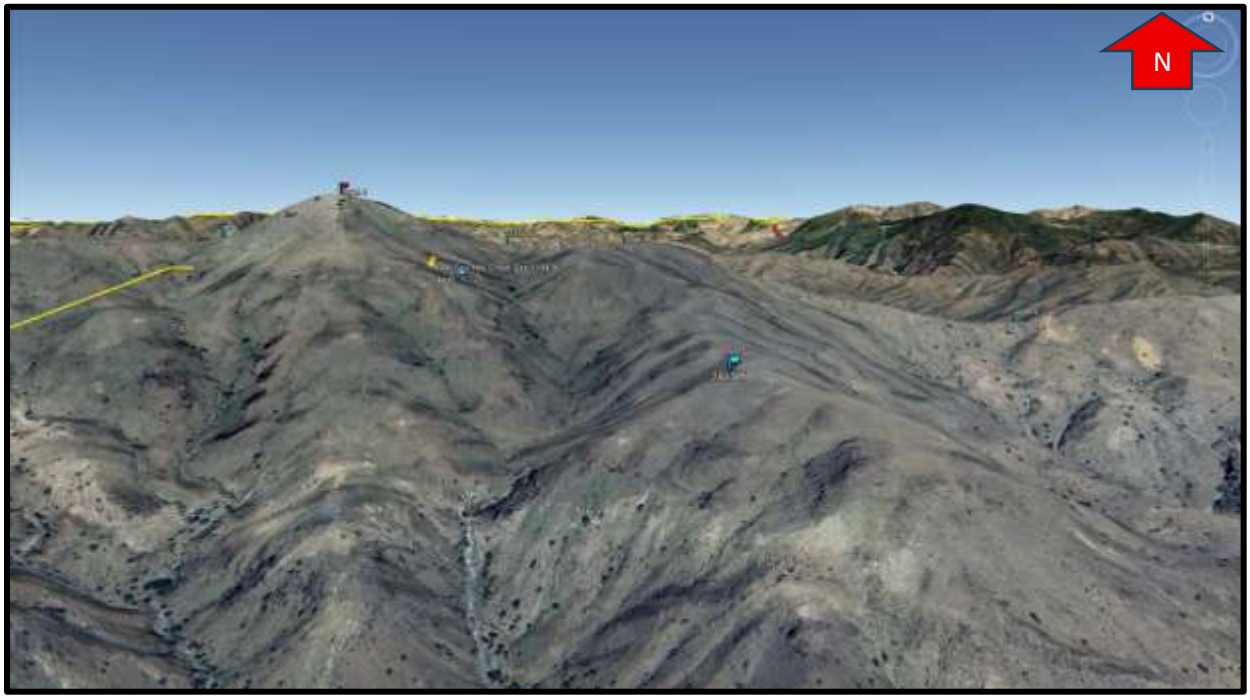

Figure 1 View of Heli Route and Altitude of the Area

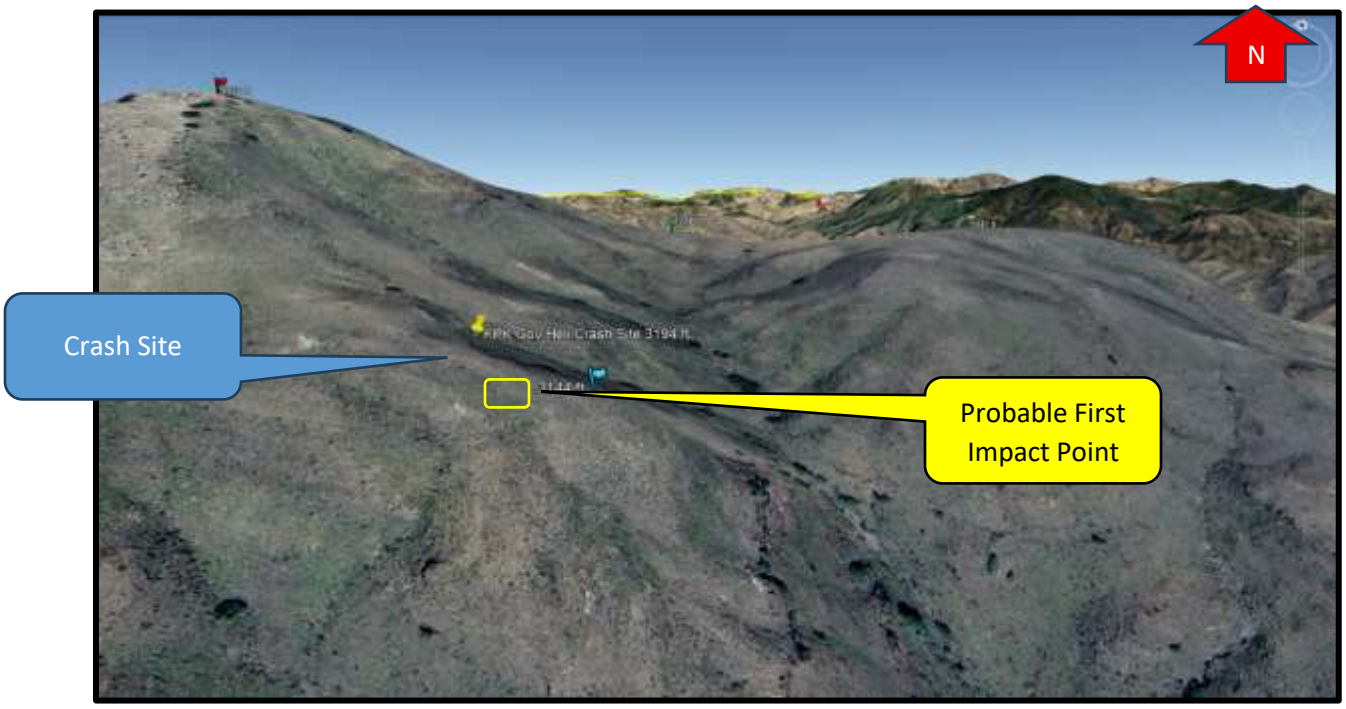

Figure 2 View of Crash Site Altitude at 3,144 ft with the Surrounding

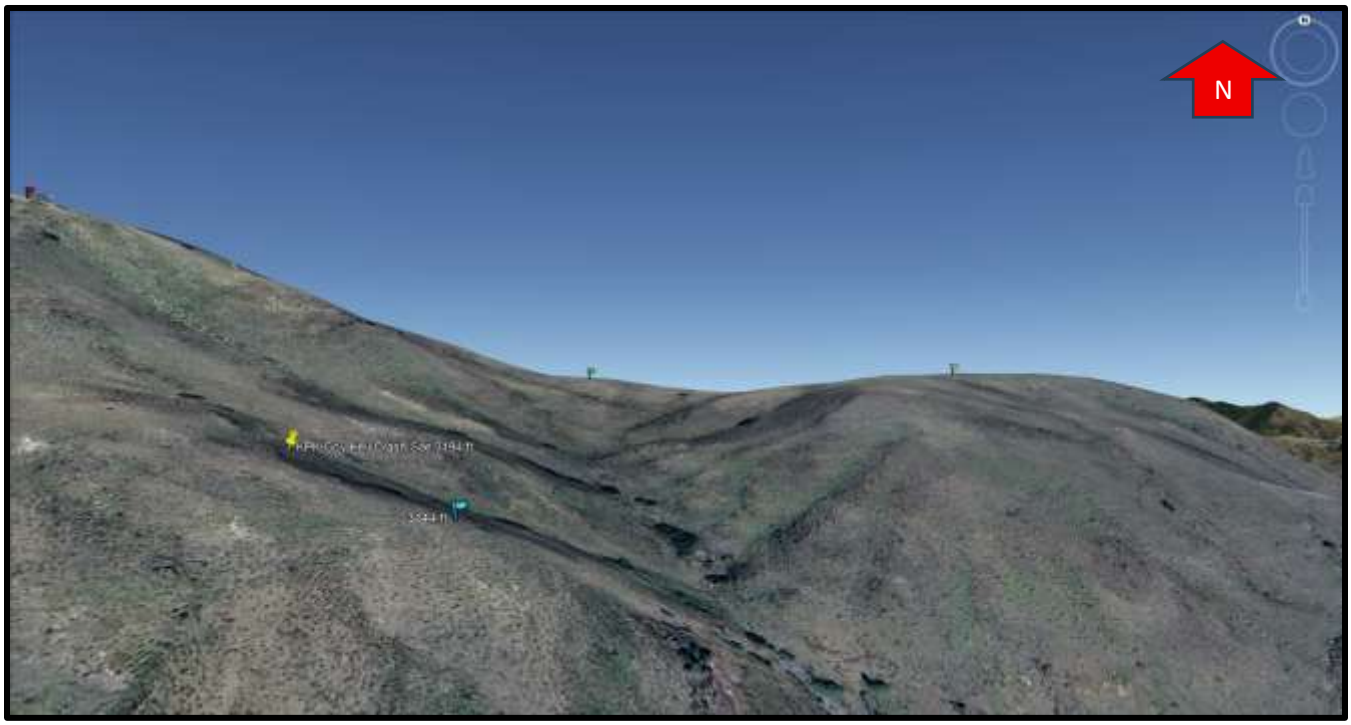

Figure 3 Closer View of Crash Site in **Northerly** Direction

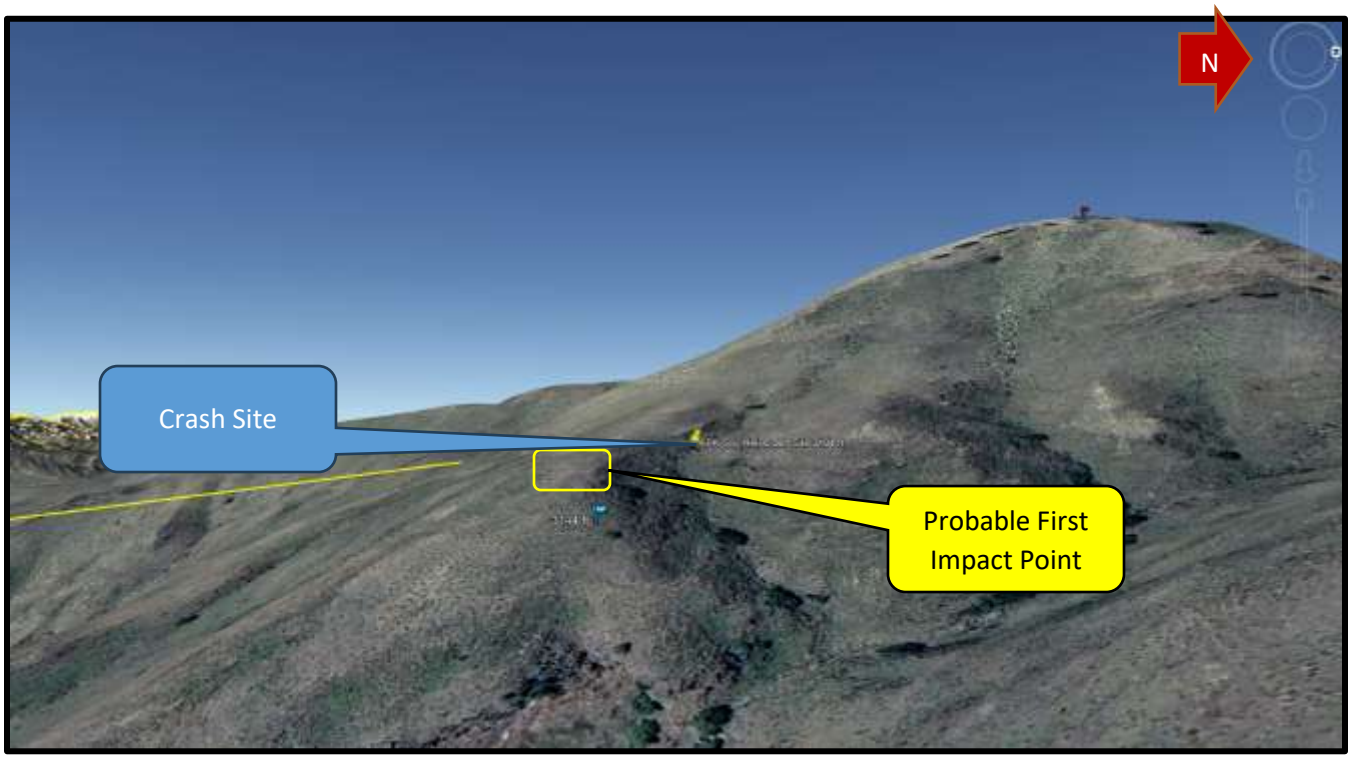

Figure 4 Closer View of Crash Site in **Westerly** Direction

Figure 5 Aerial View of AP-BIL wreckage – **Day 1**

Figure 6 Aerial View of AP-BIL wreckage – **Day 2**

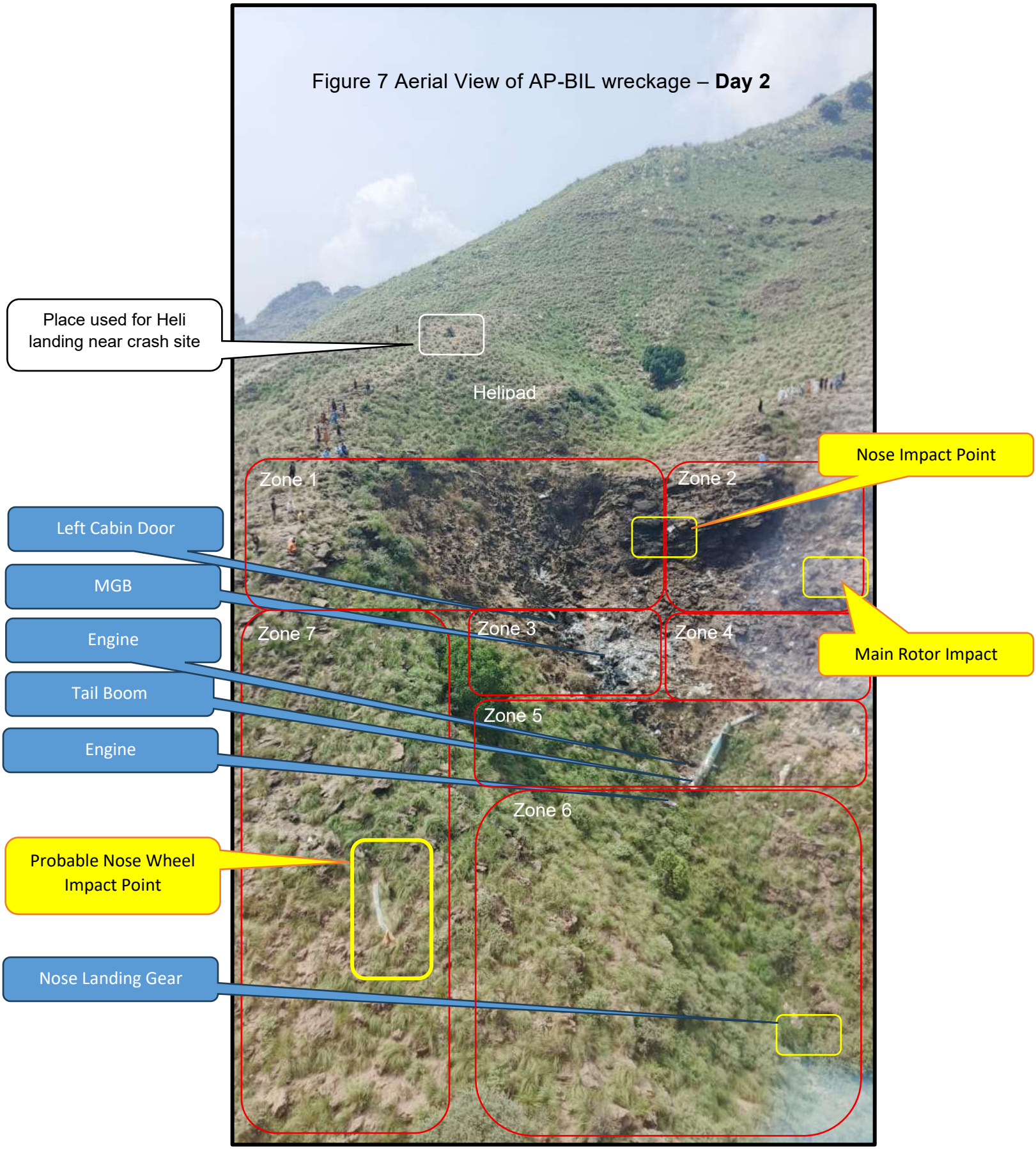
Figure 7 Aerial View of AP-BIL wreckage – **Day 2**
Place used for Heli landing near crash site
Helipad
Zone 1
Zone 2
Nose Impact Point
Left Cabin Door
MGB
Engine
Tail Boom
Engine
Zone 7
Zone 3
Zone 4
Main Rotor Impact
Zone 5
Zone 6
Probable Nose Wheel Impact Point
Nose Landing Gear

Figure 8 Cut marks of the Main Rotor Blades – Impact point

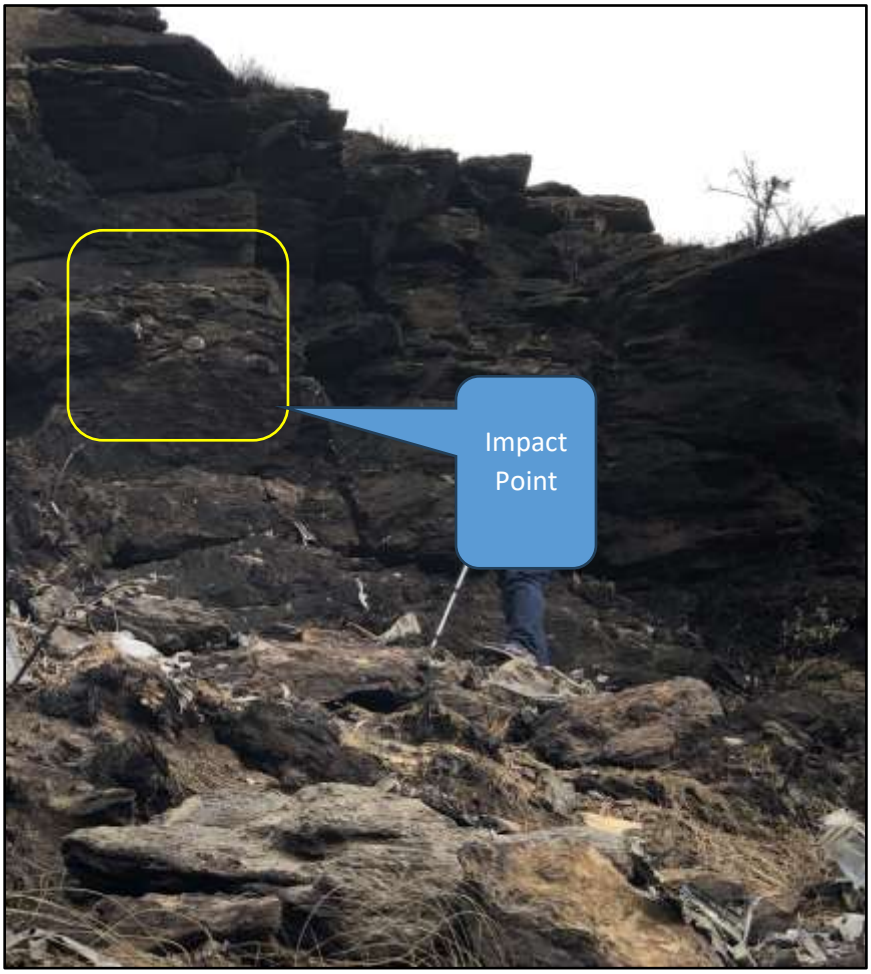

Figure 9 AP-BIL Nose Impact Point

Figure 10 Wreckage at crash site

Figure 11 Wreckage and Tail Boom of AP-BIL

Figure 12 Engine and Tail Boom of AP-BIL

Figure 13 Nose Landing Gear

Figure 64 Tail Boom of the Helicopter

Figure 15 Tail Boom and Wreckage Day-1

Figure 16 Main Gear Box and melted / disintegrated wreckage of AP-BIL

Figure 17 Main Gear Box of AP-BIL

Figure 18 MGB

Figure 19 Engine of AP-BIL

Figure 20 AC Unit of AP-BIL

Site Visits

37. During initial coordination meeting it was decided that BASIP investigation team to position at Peshawar and would be positioned at crash site via helicopter as it takes 45-50 min drive from Matta Mughal Khel and further trekking of 2.5 hours. Moreover, suitable helipad would be established near the crash site after aerial survey by BASIP team.

38. **16 August, 2025.** 02 investigators along with 02 support staff from BASIP reached Peshawar and conducted aerial recce of the site on DGAKP helicopter.

39. **17 August, 2025.** BASIP team reached crash site via heli airlift and was dropped off in running engine. The team levelled the ground for helicopter landing (15x15 ft area) for subsequent operations and conducted initial survey of crash site and recovered FDR and CVR from wreckage. The wreckage area was divided into 07 zones due spread of parts on mountain slope.

40. **18 & 19 August, 2025.** BASIP team along with 03 technicians of DGAKP reached crash site via heli airlift and was dropped off in running engine. The team identified and tag the wreckage in Zone1-3 area.

41. **20 & 21 August, 2025.** Heli airlift was not available due administrative approvals by DGAKP.

42. **22 August, 2025.** Bad weather day at site.

43. **23 August, 2025.** BASIP team along with 03 technicians of DGAKP reached crash site via heli airlift and was dropped off in running engine. The team identified and tag the wreckage zone 4-7. Moreover, wreckage was handed over to local labour for transportation to BKIAP except 05 heavy parts (02 Engines, 01 tail boom with rotor, 01 MGB & 01 Air Conditioner).

44. **24 August, 2025.** BASIP team received wreckage at BKIAP.

45. **25 August,2025.** BASIP team returned back to Islamabad and made DGAKP responsible for recovery of 05 heavy parts.

Wreckage Recovery

46. Almost the entire helicopter was burnt out, except for both engines, tail boom, part of MGB, Air conditioner, left door, nose wheel and few pieces of main rotor blades. Some of the wreckage parts had been stolen and few were subsequently recovered by the local police. Due to steep slope, and narrow pathway, the heavy parts are impossible to lift by humans and animals. In this regard, heli airlift was requested from Pakistan Army and Pakistan Air Force for recovery of larger wreckage parts. However, as the helicopters were committed to flood relief operations, the request could not be materialized. Moreover, through Jirga (Tribal Area Administration), a vendor has been hired for recovery of the 05 wreckage parts by building a vehicular track of appox 3000 feet and installation of zip line 500 feet. The work is presently in progress.

Figure 21 Cargo Door Wreckage recovery with the help of locals

Figure 22 Small Wreckage parts recovery with the help of locals from Crash Site

Figure 23 Recovered Nose Landing Gear

Figure 24 Recovered wreckage

Figure 25 Wreckage being recovered from Crash site in Bags due 2.5 hours tracking and further by road to BKIAP

Figure 26
Heavey machinery being used to build vehicular path for recovery of Heavy / large wreckage parts

Flight Recorders FDR / CVR Readout

47. FDR and CVR were recovered from the accident site in slightly damaged state with burn marks. All other instruments and navigation equipment had been completely destroyed by fire.

48. Interstate Aviation Committee has extended their support at their facility in Moscow, However, after exploration of existing facilities in Pakistan, a two (02) member IAC FDR & CVR specialists team IS likely to arrive soon, to participate during extract the of readouts in Pakistan.

Figure 7 FDR

Figure 8 CVR

Medical Examination

49. Autopsy of Flight Crew were conducted at Khyber Medical Institute, Peshawar. The medical examination revealed no evidence of poisoning or drug intoxication. However, sufficient evidences established that the cause of death was due to burning of helicopter as supported by post mortem examination.

Lab Testing

50. Fuel samples from airport and fuel bowser have been sent for lab testing and awaiting results, whereas no Hydraulic / Engine oil sample could be collected due burning of helicopter.

Preliminary Findings

51. The exact cause of the occurrence will be determined in due course of the investigation, together with any contributory factors. However, based on initial scrutiny of documents and interviews, the following preliminary findings have been noted.

52. The Mi-17 helicopter of DGAKP is also utilised for rescue operations in addition to VIP flights.

53. The mission was passed by the KPK Government official to the Director General DGAKP at approximately 0905 hrs.

54. During off-days, the air and ground crew remain on standby at their residences from dawn to dusk. This extended on-call requirement may contribute to increased fatigue, reduced rest opportunities, and decreased readiness, which could adversely affect operational safety.

55. Maintenance personnel were informed at 0905 hrs to prepare the helicopter and they arrived directly at the helipad between 0905–0930 hrs.

56. The Chief Pilot informed the aircrew about the mission between 0907-0910 hrs.

57. Refuelling of the helicopter was conducted without the placement of a fire extinguisher, and earthing of the aircraft and refueller was not ensured by either technicians or the refuelling crew. Moreover, the refuelling crew from PSO were not wearing masks and gloves during the refuelling operation.

58. A B1 (Limited) Engineering official arrived directly at the helipad at 0929 hrs and assisted the technician during pre-flight inspection.

59. The aircrew reached the office complex at 094332 and 094543 hrs respectively.

60. The mission brief was not likely conducted as both aircrews reached the office complex and were found coordinating on mobile phone. It is noted that both crew members live approximately 30 minutes' drive from the office complex. Allowing 10 minutes for changeover and 30 minutes' travel, coupled with coordination with local government for the rescue operation, left little time for a formal mission brief and may have led to omission of vital steps. Moreover, Pre-flight commenced by the aircrew at 095329 hrs, allowing only 7 minutes 49 seconds from their arrival to pre-flight start, which did not fulfil standard mission preparation and briefing timelines.

61. The Flight Operations Officer (FOO) was off duty on that day.

62. Tea was served to both pilots during running engines by the tea-bar attendant.

63. The helicopter taxied out at 100440 hrs and lifted off at 100756 hrs.

64. Khushal Control frequency was passed to the aircrew via text message after lift-off by ground crew, indicating the aircrew did not have time for complete mission preparation.

65. Both aircrews left audio messages for their supervisor after they were unable to establish contact with local government officials at Salarzai village to obtain the precise location of the rescue mission. Consequently, they were instructed to proceed to Khar and wait for further instructions. Preliminary indications suggest that the mission may have had a political humanitarian aspect, and that the operational/ safety requirements of flight activities were not fully communicated to the relevant authorities by DGAKP officials, which may have affected safety considerations. Same has been observed in overall DGAKP flight operations since the helicopter is being utilized for relief operations.

66. The weather forecast for BKIAP was TSRA with CB clouds reported at 3,000 feet. The area from BKIAP to Khar was covered with cloud with minimum ceiling approximately at or below 3,000 feet. Lightning was reported 30 NM east of the crash site.

67. The Flight Plan is normally filled in advance by the FOO, with 1- 2 signed copies kept in his office leaving blanks for route, date and take-off time. For the subject flight, the blank fields were filled by the Flight Engineer. The manifest attached to the Flight Plan did not include the names of the Flight Engineer and two technicians. Additionally, one aircrew name was changed

on the Flight Plan with cutting, and one technician name was added by an official of BKIAP pre-flight section without any signature.

68. Mission schedules and details of air and ground crew are currently managed on an ad-hoc basis, primarily through social media platforms. This approach undermines proper documentation, coordination, and accountability. Cohesion between the flying and maintenance teams is weak, resulting in fragmented operations.

69. Pay and allowances for DGAKP human resources are routed through the Center of Aviation rather than a dedicated internal mechanism, which creates ambiguity in financial oversight.

70. The effective role of key supervisors — including the Director General (DG), Chief Pilot, Chief Engineer, and Chief Administrator (CoA) — in flight operations and safety compliance is unclear. Operational decisions appear to be dictated directly by KPK government officials, reducing supervisory control and accountability.

71. Most of the rescue coordination was conducted by DGAKP through the KPK Government, with limited role played by the Airport Manager (APM), BKIAP. The effectiveness of the Rescue Coordination Centre (RCC) in the overall search and rescue (SAR) effort was questionable, as its involvement was largely limited to telephone communications.

72. The Emergency Locator Transmitter (ELT) did not activate during the crash. It is pertinent to highlight that in all three crashes over the past year (two helicopters and one Cessna), ELT signals were not received by the RCC - except for the Cessna case, in which the signal was received with a three-day delay and well offset from crash site. The PAA, PCAA, and SUPARCO should jointly analyse the reasons for non-reception of ELT signals during accidents.

73. The pre-flight document related to B2 was signed in advance by the B2 engineer of DGAKP as he visits once in a week under his contractual obligation. Engine and Instrument technicians were not present during pre-flight (one was on leave and the other on medical sick report to CMH Peshawar). The pre-flight documents were signed by one technician after Jumma prayers and by the second on the next day after his return.

74. The complete daily inspection Performa’s were signed after the helicopter take off and most probably, the aircrew did not consult DI performa’s before conducting pre-flight.

75. During scrutiny of aircraft documents, it is observed that there are only two pilot reported defects documented on tech log since 10 Sep, 2020. This points towards poor culture of documentation and may be relying on verbal entries.

76. Of the two technicians on board, one boarded the aircraft at the pilot’s request after engine start-up to provide support during the relief operation. This indicates a lack of prior planning and preparation and reflects ad-hoc practices within the organisation

77. A single Flight Plan is used for the whole day despite 2–3 hour gaps between missions and changes of passengers; the same is being accepted by officials of BKIAP pre-flight section.

78. As per discussion between aircrew of Pak Army and DGAKP at Khar, the weather was not fit for flying due clouds, however, they manage to reached Khar while flying at low altitude through valleys while avoiding weather enroute.

79. Overall, The DGAKP organisation appears to be adequately staffed for VIP flight operations only. Currently there is only one set of aircrew and ground crew employed on

minimal pay scales significantly below prevailing market rates. This limited staffing (air and ground crew) restricts opportunities to avail leave or report sick, resulting in personnel occasionally performing tasks outside their authorised duties and leading at times to extended duty hours, which is adversely affecting operational safety.

Way Forward

80. Further course of investigation includes recovery and **transportation of 05 heavy wreckage parts from crash site to HQ BASIP along with wreckage at BKIAP. FDR & CVR readout on arrival of IAC team.** Thereafter, analysis of wreckage, flight recorders data, Fuel sample(s) testing, review of operational, maintenance records and interview of witness(s) for preparation of draft and subsequently final investigation report for public release.

Summary

81. This Preliminary Report is issued in accordance with ICAO Annex-13 para 7.1 and 7.5. This report provides facts which have been determined up to the time of publication. It will be followed by advanced analysis into the root causes and a draft final investigation report shall be compiled, which would be further disseminated to the ACCREPs in accordance with the relevant provisions of the ICAO Annex-13. After the comments by the ACCREPs the Final Report shall be released.

--------- End of Preliminary Report -------